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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,959	10/02/2003	James Roy Easter	45568-00476	7285

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EXAMINER	
PENDLETON, DIONNE	
ART UNIT	**PAPER NUMBER**
2615	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	**Application No.** 10/678,959	**Applicant(s)** EASTER ET AL.	
	Examiner Dionne H. Pendleton	**Art Unit** 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/2003; 6/2004*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. **Claim 24** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the **Page 9** discussion of **figure 9**, the Applicant teaches that the radius of the contact portion may be one of a minimal degree, a moderate degree or a maximum degree. The Applicant fails to teach that the immediate invention includes means permitting the patient to adjust or change the radius between a minimum and maximum measurement. Therefore, the Applicant's recitation of "varying one of the radius" is mis-descriptive. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-6,9-16,19-22 and 23** are rejected under 35 U.S.C. 102(b) as being anticipated by **Mann (US 5,545,191).**

Regarding claim 1,

In **figure 5**, Mann teaches a retention apparatus for an external housing of a semi-implantable hearing aid comprising: a disk member (*indicated by oval disk member comprising articles **68 and 70***) disposable between a patient's skin and an external housing **62** wherein the external housing contains at least one external component for a semi-implantable hearing aid (*see, the **column 1, lines 11-12** discussion of power transfer which is well known to comprise a supercutaneous coil*), and wherein the disk member includes a first surface (not shown) for interfacing with the external housing **62** and a second surface (shown) for interfacing with the patients skin **26,** wherein the second surface includes at least one rounded transition **68** between a first (see the upper article **70**) and second (see the lower article **70**) portion of the second surface.

Regarding claim 2,

Mann teaches that the rounded transition provides a contoured shape (shown) distributing pressure over an area of the patient's skin, *see **column 5, lines 26-29***.

Regarding claim 3,

Figure 5 illustrates that the inner portion of transition **68** has a contoured shape like that of a shallow dish.

Regarding claim 4,

Mann teaches in **figure 5**, that the inner portion of transition **68** inherently includes a predetermined radius ("radius" is defined as "a field or range of operation" - *Based on the Random House Unabridged Dictionary, © Random House, Inc. 2006.*) for maintaining distance between a first coil located in the housing and a second coil **15** located subcutaneously on the patient.

Regarding claim 5,

In **column 6, lines 23-24**, Mann teaches that a magnet may be used in combination with the retention apparatus for alignment to the implanted unit, thus reading on "magnetic in nature", as broadly claimed.

Regarding claim 6,

Mann teaches in **column 6, lines 23-24** a detachable external magnet for properly aligning the external housing with the implanted unit, thereby inherently teaching a magnet "receptacle", as broadly claimed.

Regarding claim 9,

Mann teaches in **figure 5**, an external apparatus for a semi-implantable hearing aid, comprising: a housing containing at least one component of a semi-implantable hearing aid, the housing including an interface (*indicated by oval disk member comprising articles **68 and 70***) for retentive positioning of the housing on a patient's skin **26**, wherein the interface includes a first surface (shown) having a rounded transition **68** between a first portion of the first surface (see the upper article **70**) and a second portion of the first surface (see the lower article **70**); and In **column 6, lines 23-24**, Mann teaches that a magnet may be used in combination with the retention apparatus for alignment to the implanted unit, said magnet reading on "a first magnetic apparatus for retentive positioning of the first surface in juxtaposed relation to an implanted portion **12**".

Regarding claim 10,

Mann teaches in **Figure 5,** that the interface **68,70** is an integral part of the housing **62.**

Regarding claim 11,

Mann also teaches in Figure5, that the interface **68,70** includes a separate structure **64** from the housing **62** and that the interface **68,70** includes a second surface (not shown) for interfacing with the housing.

Regarding claim 12,

Mann teaches that the rounded transition provides a contoured shape (shown) distributing pressure over an area of the patient's skin, *see **column 5, lines 26-29.***

Regarding claim 13,

Figure 5 illustrates that the inner portion of transition **68** has a contoured shape like that of a shallow dish.

Regarding claim 14,

Mann teaches in **figure 5**, that the inner portion of transition **68** inherently includes a predetermined radius ("radius" is defined as "a field or range of operation" - *Based on the Random House Unabridged Dictionary, © Random House, Inc. 2006.*) for maintaining distance between a first coil located in the housing and a second coil **15** located subcutaneously on the patient.

Regarding claim 15,

In **column 6, lines 23-24**, Mann teaches that a magnet may be used in combination with the retention apparatus for alignment to the implanted unit, thus reading on “magnetic in nature”, as broadly claimed.

Regarding claim 16,

Mann teaches in **column 6, lines 23-24** a detachable external magnet for properly aligning the external housing with the implanted unit, thereby inherently teaching a magnet “receptacle”, as broadly claimed.

Regarding claim 19,

The structure of Mann’s apparatus inherently teaches a method for mounting an external portion **62** of a semi-implantable hearing aid, comprising: providing a surface on the external portion that includes a contoured contact portion **68** for contacting the patient’s skin; providing a range of operation i.e. ”radius” of the contoured contact portion **68** as a function of a magnetic attraction between the implanted magnet in housing **12** and an externally located magnet *see, **column 6, lines 23-24;*** and disposing the external portion **62** of the semi-implantable hearing aid on the patient proximate the implanted magnet, in housing **12.**

Regarding claim 20,

Mann teaches locating a housing **62** which inherently contains at least one external component for a semi-implantable hearing aid, proximate the implanted magnet in housing **12.**

Regarding claim 21,

Mann teaches interfacing a disk shaped retention apparatus **68,70** including a contoured contact surface **68** with the housing; and locating the interfaced disk and housing on the patient proximate the implanted magnet **12.**

Regarding claim 22,

Mann teaches providing a range of radii (see the internal portion of contour **68** to achieve a predetermined depression (said depression shape being determined prior to manufacture) of the contoured portion into the patient's skin to achieve a desired separation between a first coil in housing **62** and a second coil located in housing **12.**

Regarding claim 23,

Mann inherently teaches that the radii of the contour will be selected as a function of the connection between external housing **62** and implanted housing **12,** since Mann is concerned with the effective coupling between the external housing **62** and implanted housing **12** (*see **column 4, lines 29-32***).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 7,8,17,18 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mann (US 5,545,191)** in view of **Kuzma (US 6,275,736).**

Regarding claims 7 and 17,

Mann teaches the inventions of claims 6 and 16.

Figure 5 of Mann teaches that retention member **68,70** is connected to housing **62**. Mann does not clearly teach that retention member **68,70** is retained to the external housing **62** via a first magnet and a second magnet within the housing **62**.

In ***column 4, lines 5-6,*** Kuzma teaches constructing a retention member **11** from ferromagnetic material such that the retention member is retained to the magnet within an external housing **20** i.e., magnetic coupling. It would have been obvious for one of ordinary skill in the art at the time of the invention to substitute the magnetic coupling of Kuzma for the coupling of Mann, for the purpose of providing a separable connection between the external housing and retention member.

Regarding claims 8,18 and 27,

Mann teaches the inventions of claims 3,11 and 21. While Mann teaches that a surface (not shown) of the apparatus interfaces with the housing **62,** Mann does not clearly teach an interface with the patient's hair.

Kuzma teaches, in **figures 1B, 3, 5A, 4a-4C, 6A-6C, 7** etc., an interface for connecting to the external housing of a semi-implantable hearing aid, wherein the interface is a hair clip, thus reading on "an interface with the patient's hair".

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Mann and Kuzma, for the purpose of providing a comfortable means of attaching the external unit of the hearing aid to the patients hair and over the area where the implant is located.

4. **Claims 25 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mann (US 5,545,191).**

Regarding claim 25,

As best understood with regard to the USC 112 second paragraph rejection above, Mann teaches the invention of claim 19.

Mann does not specifically teach using magnetic attraction for holding the external unit in place.

However, in ***column 6, lines 23-26***, Mann teaches that a Velcro pad, or an equivalent means of holding the external unit in place may be employed, thereby not restricting to only using a hook and loop fastener.

The Examiner takes Official Notice that it would have been obvious for one of ordinary skill in the art to substitute a magnetic pad for the Velcro pad of Mann, thus facilitating a magnetic connection between the external housing and implanted unit, as an equivalent means of holding the external unit in place.

Regarding claim 26,

In **column 6, lines 23-24**, Mann teaches that a magnet may be used in combination with the retention apparatus for alignment to the implanted unit, said magnet reading on "a first magnetic apparatus for retentive positioning of the first surface in juxtaposed relation to an implanted portion **12**".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne H. Pendleton whose telephone number is 571-272-7497. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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3/19/07